

AMENDMENTS TO THE DRAWINGS

Applicant submits herewith Replacement Sheets for Figures 9, 10, 11 (A-C), 12 and 13. The figures have each been provided with a designation of “conventional art” in order to comply with the Examiner’s request.

Attachment: Replacement sheets (5)

REMARKS

Claims 1-7 were pending in the present application. By virtue of this response, claims 1-5 have been amended. Accordingly, claims 1-7 remain currently under consideration. Amendment and cancellation of certain claims is not to be construed as a dedication to the public of any of the subject matter of the claims as previously presented. No new matter has been added.

Drawings

The Examiner has indicated that several of the figures should be designated by a special legend, since they illustrate only that which is old. Applicant submits herewith Replacement Sheets for Figures 9, 10, 11 (A-C), 12 and 13, with a legend --Conventional Art--. It is respectfully submitted that these drawings fulfill the requirement of MPEP § 608.02(g).

Anticipation Rejection of Claims 1-5

Claims 1-5 are rejected as being anticipated by Uchida (USP 6,636,444). Applicant has amended claim 1 (and amended the dependent claims, where appropriate, to comport with the amendment to claim 1), to more particularly recite the subject matter thereof. It is respectfully submitted that claim 1, as amended, and claims 2-5, dependent thereon, recites subject matter that is patentable over the disclosure of Uchida.

In particular, claim 1 has been amended to recite that the “masking” by the masking section is based on a characteristic of a particular write operation regarding that data. In addition to claim 1, the Examiner also contends that claims 2-5 are anticipated by the Uchida disclosure. It is respectfully submitted that, after specifically discussing how claims 2-5 are not anticipated by Uchida, it will also be clear that claim 1 is not anticipated by Uchida.

Claim 2 recites that the “characteristic” (upon which the masking is based) is “a data bus width in the semiconductor memory device.” The Examiner contends that col. 1, lines 34-36 of Uchida discloses this feature. However, that portion of Uchida reads:

“In recent semiconductor memory devices, with increasing data transfer rate, the data bus width has been increasing and . . .”

Thus, this section appears to merely be a recognition that data bus width is increasing, and nothing in this portion discloses (or suggests) masking by a masking section based on the data bus width.

Claim 3 recites that the “characteristic” is a result of “comparing a value of an address of the memory array with a value of at least one of a beginning address and an end address of the memory array, when the data is read from the page buffer section.” The Examiner contends that col. 11, lines 56-58 and col. 2, lines 64-67 disclose this feature. However, those portions of Uchida read:

The address comparator 44 judges (as described with references to FIGS. 8A and 8B) whether the address associated with a read command, for example, matches the write address where the data is to be written by the next write command.”

and

The data selector may select the data output from the memory cell of the data output from the write amplifier, based on mask information indicating enable/disable of the write data.

The “mask information” is not disclosed (or suggested) as being “based on a characteristic of a particular write operation regarding that data” as recited in claim 1. Rather, as shown in FIG. 5A and described at, for example, col. 8, lines 52-53, “the mask signal MASK is one that is generated from the signal DM supplied from the outside.” There is no disclosure of on what the mask signal MASK is based, let alone on a characteristic of a particular write operation . . .”

The cited portion of Uchida relative to the address comparator, while it is similar to the language of claim 3 in that it recites comparing some addresses, does not even recite comparing

with either a beginning address or an ending address of a memory array.” Furthermore, in any event, there is no disclosure that “mask information” is based on the cited address comparison.

Claim 5 recites that the “characteristic” is a result of “counting the number of pieces of data to be written into the memory array.” The Examiner references element 23 of FIG. 5B, as well as col. 7, line 57 to col. 8, line 21.

It is not clear that element 23 (which is a “refresh address counter,” in FIG. 5A) does not count “pieces of data” at all. In any event, Uchida does not disclose (or suggest) that “mask information” is based on a result of counting by the refresh address counter 23 (whatever is being counted). At best, the output of the refresh address counter 23 is used to actually address the memory array (following the signal path from the refresh address counter 23, through the switch 24, and finally through the switch 45). The cited portion of col. 7 and col. 8, if anything, confirms Applicant’s assertions that Uchida discloses that the mask signal data “is input from the outside” or, at best, that Uchida fails to disclose on what the mask signal is based.

For at least the aforementioned reasons, it is respectfully submitted that Uchida fails to disclose each and every feature of claims 1-5. As a result, Applicant respectfully requests that the anticipation rejection of claims 1-5 be withdrawn.

Obviousness Rejection of Claims 6-7

The Examiner also contends that the subject matter of claims 6-7 are obvious, in view of Uchida and “Applicant’s Admitted Prior Art (AAPA)”. As discussed below, Applicant respectfully disagrees.

First, as discussed in detail above, Applicant respectfully submits that Uchida fails to disclose each and every element recited in claim 1. This refutes an essential premise of Applicant’s rejection of claims 6-7 and the rejection of claims 6-7 is improper for at least this reason.

Furthermore, it is respectfully submitted that Uchida and AAPA are improperly combined. For a combination to be proper, the Examiner must show some motivation or suggestion, in either the references or in knowledge held by one of ordinary skill in the art, to make the combination. Merely stating that two references describe apparatus for performing functionality in the same general subject area is not a proper showing. That is, while “nature of the problem to be solved” is a proper consideration, a broad statement that two references are in the same general subject area (here, in the area of “”subject matter for holding write data”) is not a proper consideration. For this reason, then, the Examiner has failed to set forth a proper prima case of obviousness.

CONCLUSION

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue. If it is determined that a telephone conference would expedite the prosecution of this application, the Examiner is invited to telephone the undersigned at the number given below.

In the event the U.S. Patent and Trademark office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 03-1952 referencing docket no. 299002056600. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

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Respectfully submitted,

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